

# **HOW DOES GLOBALIZATION IMPLY TRADING VOLUME ACTIVITY AND ABNORMAL RETURN BEFORE AND AFTER OF STOCK SPLIT**

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## **Abstract**

*In this globalization era stock split has been a debatable and puzzling phenomenon for financial theorist, for there is inconsistency between the theory and practice. Theoretically, stock split will only increase the amount of shared stocks, without increasing the profit for investors, or any value of the firms. While in practice, some empirical research show that market tends to react to the announcement of stock split. This research to explain about there is or not any differences between trading volume activity and abnormal return before after the stock split announcement. Selected population for this research are all company that listed in Indonesian Stock Exchange. Sample consists of 41 stocks performing the stock split during the period of Januari 2005 to December 2009 by purposive sampling method.*

*Pursuant to result of data analysis, could be concluded that as a whole result from the statistic test at 10 days period before and after the stock split announcement to the volume of trade is known that the overall results showed difference between the average trading volume activity before and after the stock split announcement. Neither the average abnormal return as the overall results of statistical tests on the 10 days before and after the stock split announcement showed significant difference in abnormal return before and after the stock split announcement period.*

*Keywords: Globalization, Stock Split, Trading Volume Activity, Abnormal Return.*

## 1. INTRODUCTION

As economic globalization occurs, the boundaries of a country will become blurred and the linkages between national economies with the international economy will be more closely. Globalization of the economy on the one hand will open the market opportunities of the domestic products to international markets competitively, the opposite is also open opportunities for the entry of global products into the domestic market.

In globalization, there are two basic things into its agenda of removing barriers to trade and investment across borders. The decision to remove the boundaries that allow large companies have invested their capital in all parts of the world, including Indonesia and vice versa; the formation of regional trading blocs such as ASEAN, NAFTA, CIS, APEC, and others who have a commitment to promote free trade. Increasing competition in world trade today, requires that companies carry out activities with the aim to gain market and to gain profit. The capital market is one effective means to attract funds from investors, whether investors from domestic and abroad. The funds will be channeled into productive sectors, so that capital markets play an important role in the economy.

Information owned by the investors can usually be derived from public information and personal information. Public information and personal information will be beneficial to investors, causing investors interested in capital market transactions.

Stock split has been debated and puzzling phenomenon to finance theorists, because there are inconsistencies between theory and practice. Theoretically, the stock split will only increase the number of common shares, without increasing profits for investors, or the value for the company. While in practice, few empirical studies indicate that the market tends to react to the stock split announcement. This study tried to explain about whether or not the difference between trading volume activity and abnormal return before and after the announcement of stock split in the era of globalization. Market reaction to stock split has been shown to change the average trading volume activity and abnormal return.

The phenomenon of overpriced stock price and liquidity of shares is the reason for the company to conduct a stock split or a stock split in the era of globalization. This is understandable because if the stock market price is too expensive it becomes unattractive to investors, particularly small investors, and

eventually became illiquid stocks. Thus the more expensive the stock price and the lower the liquidity of shares, the more likely the company did a stock split (stock split).

Stock split is a good change or a nominal amount of shares by way of stock split became more and reduce the nominal price per share proportionately. The main purpose of stock split is to create a more liquid shares traded. Illiquid stock is affected by two things: overpriced stock price and number of shares outstanding is too little. With the stock split the stock price falls and the number of shares will increase.

From exposure to things tesebut above, should be an interesting material in academic study and the importance of this research aims to empirically examine whether globalization affects the activity of trading volume and abnormal return before and after the announcement of stock split. Based on the background of the problems described above, the formulation of the wish expressed are: (1) Is there a significant effect between the average trading volume before and after the announcement of stock split in the era of globalization? (2) Is there a significant difference between the average abnormal return before and after the announcement of stock split in the era of globalization?

## **2. LITERATURE REVIEW AND HYPOTHESES**

### **Understanding Globalization.**

Globalization is a term that has a relationship with the increase of interdependency among nations and between people around the world the world through trade, investment, travel, popular culture, and other forms of interaction other so that the boundaries of a country becomes increasingly narrow. Economic globalization is a process of economic activity and trade, where countries around the world into one market forces increasingly integrated with the state's territorial borders unimpeded. Globalization of economy requires the removal of all restrictions and impediments to capital flows, goods and services.

### **Definition of stock split.**

According Jogiyanto (2003:415), a stock split (stock split) is split into n piece of stock shares. The price per new share after the stock split is  $1 / n$  from the

previous price. Thus, the actual stock split does not increase the value of the company or in other words stock split has no economic value. Stock split is an event that caused the change in par value, the value of the stock market, and the number of shares outstanding. Therefore, a stock split can be categorized as an event or information that affects the company's securities or investment decisions investors.

According to Baker and Powell (in Sears and Trennepohl, 1993), the distribution of shares in the form of a stock split simply have changes that are "cosmetic" because the stock split has no effect on the flow of the company and the proportion of investor ownership. This opinion is contrary to Baker and Gallanger (also at Sears and Trennepohl, 1993) which states that the split-back price per share at the optimal level of trade and increase trade volume.

#### **Understanding the volume of trade and its relationship with the stock split.**

According to Sutrisno Wang et al (2000), volume of trade is the number of unit shares traded at a certain period. Changes in share trading volume shows the activity of trading in the stock market, the greater the trading volume compared to the total shares issued, the more liquid shares.

So shares are illiquid stocks easily exchanged or used as money. Illiquid shares that would result in losing the opportunity to profit (gain). The size of the liquidity of shares used by Copeland is the change in proportion of stock trading volume, and used another measure of changes in transaction costs as a presentation in the number of shares traded

Also, lower stock prices after the stock split is intended to alter investors' odd lots of investors who purchased shares under 500 sheets (1 lot) to investors who buy round lots of the investors who buy at least 500 sheets of (1 lot). Increased investor and the increasing number of round lot of stock trading for small investors can invest in a cheaper price, causing the level of stock trading volume rises.

#### **Understanding stock return and abnormal return and its relationship with the stock split.**

According Jogiyanto, (2003:109) there are two ways to obtain the level of profit share (stock return). First, the level of benefits obtained from the difference between the selling price and buying price. Return is the return that actually happened and is often called the return realization (realized return). Return an

important realization because it is used as one measure of performance of the company and is calculated based on historical data. Historical return is also useful as determination of return expectations and risk the future. Second, the level of profits derived from investment in shares or often referred to as the expected rate of return of stock return expectations (exspection return).

One realization of the return measurement used is the total return (total return). Total return is the whole of an investment in a given period. Total return consists of capital gain (loss), and yield. Capital gains (capital gains) is the gain on sale of shares due to the difference of the selling price with the purchase price .

### **Review of Recent Research.**

Haryanto and Herman WD (2005) conducted a study of 66 sample companies in the JSE in the period 1999-2003. The study aimed to analyze whether there are differences in the average liquidity and abnormal stock returns before and after the stock split announcement. From the results of statistical tests on ten-day period prior to ten days after the announcement to the liquidity of the stock split there were no significant differences. As for the abnormal return has a significant difference, it shows that stock split announcements have information content poositif.

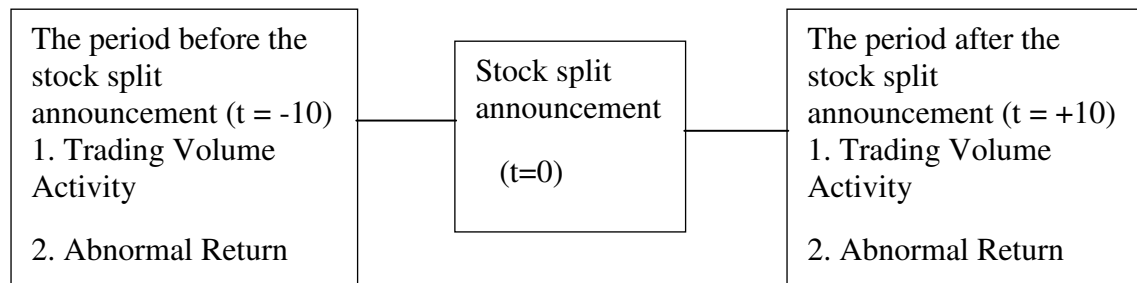
Adhi Prawono (2007) conducted a study of 30 companies that make a stock split policy in the period 2002-2005 on the JSE. The purpose of the study was to analyze the effect of stock split abnormal return and liquidity. Results were expressed that there are significant differences between average stock liquidity after the average liquidity of stocks before the stock split. So is the abnormal return, there were no significant differences between the abnormal returns before and after the stock split.

Erika Novianty Sembiring BK (2004) conducted a study on the effect of stock split abnormal return on the Jakarta Stock Exchange. The study provides results that there are significant positive abnormal return when the stock split announcement. The existence of this abnormal return indicates that the stock market reacted to spilled. Positive reactions can occur due to market market stock split associate with companies who will obtain a large increase in corporate earnings. The

yield on the average abnormal return before and after stock split has no significant difference.

Vita Ari Wibowo (2003) in the journal Haryanto and Herman (2005) conducted a study of 48 companies that later after the selection to 29 companies that announced a stock split with the period 1999-2000. The purpose of this study is to analyze whether there is a significant difference between the average trading volume of company shares before and after the stock split (stock split) on the JSE. The results of this study is that there is significant differences in the average stock trading activity in the third period of comparison, 5 days before and 5 days after the announcement of a stock split, between 5 days before and 10 days after, and 5 days before and 15 days after the stock split announcement.

### Framework



Formulation of hypothesis.

The formulation of the hypothesis is the answer to the problem proposed temporary. Tests this time aiming to find out whether there are significant trading volume activity and abnormal returns before and after the announcement of stock split in the era of globalization. Based on the description above can be formulated in a formulation of hypotheses as follows:

Ho: There are significant differences between the average stock trading volume before and after stock split in the era of globalization.

H1: There are significant differences between the average abnormal stock returns before and after stock split in the era of globalization.

### 3. RESEARCH METHOD

#### Population

The population examined in this study are all actively traded stock company and listed on the Stock Exchange (Indonesia Stock Exchange) and reported in ICMD (Indonesian Capital Market Directory), which conducted a stock split in the period 2005-2009.

#### Sample

The samples in this study conducted by purposive sampling method, criteria for the study sample were determined as follows:

1. Listed companies in Indonesia Stock Exchange in the period 2005-2009.
2. Company conducted a stock split policy in the period 2005-2009.
3. During the study period the company has a complete data include: date of the announcement, trading volume, and number of shares, closing price, and stock index for 10 days before and 10 days after the stock split announcement. The rationale for these criteria is to avoid bias in the data presented by this information and the presence of confounding effects (effects that disrupt) the results of research.

Based on the above criteria, then that can be used as a sample of 41 companies that make stock split-up in 2005-2009 in Indonesia Stock Exchange.

#### Operational Definitions.

Variables used in the study were:

##### a. Trading Volume Activity

The trading volume is the number of unit shares traded at a certain period. The trading volume can be measured from the activity of stock trading volume (trading volume of activity / TVA). (Hary and Hermawan W.D, 2005)

$$TVA_{it} = \frac{\text{stock company's of trading at time } t}{\text{stock company's of outstanding at time } t}$$

TVA = The total volume of companies activity outstanding at time t.

i = Name of sample companies.

t = Time.

## b. Abnormal Return

Abnormal return is the change in share price used to test whether the gain above-normal returns as a result of information published.

$$AR_{it} = R_{it} - E_{(R_{it})}$$

$A R_{it}$  = *abnormal return* company's shares traded at time t

$R_{it}$  = Return company's outstanding stock at time t

$E_{(R_{it})}$  = *Expect return* stock return on day t

## Data Analysis Method

### T test (Paired-Sample T Test)

T test used to determine significance differences variabel average for all samples tested. T test objective is to determine whether the average difference was caused by another factor that really matters significantly.

Data Processing Procedure.

### a. Calculating the volume of trade.

Trading volume is measured from the activity of stock trading volume or TVA

$$TVA_{it} = \frac{\text{stock company's of trading at time t}}{\text{stock company's of outstanding at time t}}$$

TVA = The total volume activity of company's outstanding at time t.

i = Name of sample companies.

t = Time.

### b. Calculate the average trading volume.

$$ATVA = \frac{\sum_{i=1}^n TVA_{i,t}}{n}$$

ATVA = Average *total volume activity* on day t.

$TVA_{i,t}$  = *Total volume activity* pada sekuritas I pada period t.



n = total stock

c. Calculating stock return (Jogiyanto, 2000:108).

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}}$$

Rit = Stock Return I on day t.

Pit = price of stock I on day t

Pit-1 = price of stock I on day t-1.

d. Calculate market return (Jogiyanto, 2000:231)

$$R_{mt} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}}$$

Rmt = Return the stock market index on day t

IHSGt = Composite Stock Price Index on day t-1.

IHSGt-1 = Composite Stock Price Index on day t-1.

e. Calculating Expected Return (Jogiyanto, 2000:427-428)

In this study, expectations of return are calculated with the market adjusted model. Market adjusted model (market adjusted model) assumes that the best estimators to estimate the return of a security is the market return (RMT) at that time. By using this model, there is no need to use the period of estimation, because the return from security to be estimated is equal to the market index.

Calculation of expected return in Jogiyanto (2000) using the following equation:

Next expected return is calculated by the formula:

$$E_{(Rit)} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}}$$

E (Rit) = Expected return on day t.

IHSGt = Composite Stock Price Index on day t-1.

IHSGt-1 = Composite Stock Price Index on day t-1.

f. Calculating abnormal return (Jogiyanto, 2000:416).

$$AR_{it} = R_{it} - E(R_{it})$$

$AR_{it}$  = abnormal return company's shares traded at time t

$R_{it}$  = Return company's outstanding stock at time t

$E(R_{it})$  = Expect return stock return on day t

g. Calculate the average abnormal return (Jogiyanto, 2000).

$$AAR_t = \frac{\sum_{i=1}^k AR_{i,t}}{k}$$

AAR<sub>t</sub> = Abnormal stock return securities to the i in the period to-t.

k = Number of securities are affected by the announcement event.

## Hypothesis Testing

To test this hypothesis in a study carried out by means of analysis Paired Sample T-test.

## RESULTS AND DISCUSSION

### Research Results

The population used in this study are listed emitten in BEI (Bursa Efek Indonesia) are reported in ICMD (Indonesian Capital Market Directory), which conducted a stock split in the period 2005-2009. Of this population acquired 41 companies that made the research sample. The data used are daily stock prices (close price) that is the closing share price on the 10 days before the date of the announcement and after the stock split announcement. The sampling technique in this study using purposive sampling, where each firm does not have the same opportunity to be a sample in this study, but only companies that meet certain conditions or criteria that can be used.

### Testing hypotheses 1 and discussion

In the first hypothesis will be tested whether there are significant differences between the average trading volume of activity before and after the stock split. The level of significance used in this research by 5%. To calculate whether there are differences in

trading volume around the dates before and after the stock split announcement is used with data processing using spss software based on the data processing it can be seen the results as follows:

Table 1  
Different test results on trading volume

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	TVA_Sblm - TVA_Sesudah	- .04966165	.06838037	.02162377	-.09857802	-.00074528	-2.297	9	.047

Source: Annex 5 pages

Based on table 1 above can be explained that the results of tests of stock trading volume before and after the stock gained a significant level of  $0.047 < 0.05$  so that there are significant differences between trading volume before and after the stock split announcement, so the first hypothesis that stated in this study proven.

The results suggest there are significant differences in trading volume before and after the stock split announcement.

A liquid is said shares if the shares easier to trade or used as money. Illiquid shares that would cause a loss of opportunity to profit (gain). So the more liquid a stock is the number or frequency of transactions are more liquid. It also shows the interest of investors to have these Sahm. High interest is possible to obtain higher returns than the low liquidity of shares so that the level of liquidity of shares will generally affect the respective stock prices.

Stock split policy can improve the liquidity of shares in accordance with the expectations of issuers. Thus the alleged policy of stock split will lead prices to normal levels, and can enhance shareholder liquidity proven. This is evidenced by the discrepancy between the volume of stock trading before and after the stock split.

Trading range that the stock split will improve trading liquidity of shares according to this theory, stock prices are too high (overprice) causes less active stocks are traded. With the stock split the stock price will fall so that investors will be attracted to invest because the stock price affordable by the ability of investors. As a result of stock trading volume will increase and liquidity of stock trading will also increase.

Management conducts a stock split is driven by market practitioners that are consistent with the assumption that with mealukan stock split to keep the stock is not too expensive, where the share was split because there is an optimal price limit for the shares and to increase the purchasing power of investors. So still a lot of people who want memperjualbelikannya, which in turn will increase the liquidity of stock trading. This proves that the goal of the company conducted a stock split for the stock price according to market prices can be achieved, and the market can respond by purchasing company stock, bringing the total number of shares traded increased.

## Testing hypothesis 2 and discussion

To calculate whether there are differences in trading volume around the dates before and after the stock split announcement is used with data processing using spss software based on the data processing it can be seen the results as follows:

Table 2  
Different test results on the abnormal return

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Arit_Sblm - Arit_Sesudah	1.95048011	2.55249803	.80717075	.12453302	3.77642721	2.416	9	.039

Source: Annex 5 pages

Based on table 2 above can be explained that the abnormal return results from testing before and after the stock gained a significant level of  $0.039 < 0.05$  so that there are significant differences between the abnormal returns before and after the stock split announcement, so the second hypothesis is stated in this study proved .

This study states there are significant differences between the abnormal returns before and after the stock split. In this study indicate that there were no significant differences between the abnormal returns before and after the stock split.

Effect of the announcement of the abnormal stock return proved in accordance with the signaling hypothesis which states that the split signals are informative to investors about the company's prospects. This certainly will attract investors to buy shares offered. The announcement of stock split will lead to price changes up or down. Market reaction is usually measured by using the abnormal return. An announcement containing content inforamsi kapada abnormal return will give the market. In this study there is a difference between before and after the stock split announcement. So we can conclude that investors react to the stock split announcement. Thus the stock split announcement provide information to investors it is shown by the abnormal return.

## **CONCLUSION**

Based on the results of data analysis, it can be concluded that as a result of statistical tests on the overall 10-day period before and after the stock split announcement to the activity of trading volume and abnormal return is known that the overall results showed no difference between the average trading volume before and after the announcement of stock split at. Thus the analysis of abnormal returns before and after the stock split is to provide a positive information content in order to influence investor decision-making so that investors react to the stock split announcement. This means that in an era of globalization stock split to provide meaningful information for investors with stock prices so that investors are interested in buying shares, with the discovery of significant differences between the abnormal returns before and after the stock split.

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